

LONGLEAF PINE | Iconic Southern Forests Aiding Military Resilience and Readiness



The longleaf pine ecosystem was historically the predominate forest type across the Southeast, serving as one of the most important habitats in the nation for plants and wildlife. Over time, the conversion of this ecosystem to other land uses or forest types has reduced the longleaf acreage to less than 5% of its original extent. Additionally, the decrease in naturally occurring, low intensity fires, on which this ecosystem depends, has led to degradation of longleaf forests that remain.

These forests support 29 federally listed threatened or endangered species and more that are candidates for listing under the Endangered Species Act (ESA), primarily due to habitat loss. These species include the federally protected red-cockaded woodpecker, eastern indigo snake, flatwoods salamander, and gopher tortoise. Prescribed fire is a key element in longleaf forest management to improve wildlife habitat for threatened and endangered species, while also promoting healthy longleaf ecosystems and reducing the risk of catastrophic wildfire.

DoD Supports Longleaf On- and Off- Installation

To prevent DoD lands from becoming the last remaining habitat for imperiled species and to avoid or relieve restrictions on military activities, DoD conducts on-installation natural resource management and climate change adaptation activities such as prescribed burning, reforestation, forest stand improvement, and species management. Additionally, frequent fires from regular training activities help keep on-installation forests in healthy condition. All of these activities support habitat for imperiled species, enhance installation resiliency, and allow training in realistic environmental conditions. In total, **DoD manages over 723,000 acres of longleaf pine habitat on 35 military installations**, which represents a significant portion of the remaining longleaf across the United States.

Off-installation, DoD uses the Readiness and Environmental Protection Integration (REPI) program to help reduce military-community-environmental conflicts that could adversely affect the Department's ability to test, train, and operate, such as the loss of longleaf pine habitat.

How Longleaf Forests Support DoD Missions:



Expanded habitat, which decreases the likelihood that threatened and endangered species will seek sanctuary on military lands



Optimal terrain and cover for military mission training and operations



Greater resilience to climate related threats such as wildfire, hurricanes, tornadoes, and drought compared to other tree species



Dark skies and landscapes crucial for nighttime training activities



Compatible land use near military facilities to buffer against potential conflicts with airspace, safety, noise, and smoke during training exercises



Ecosystem services such as carbon sequestration, erosion control, and water supply, purification, and flow regulation



Economic benefits to rural economies



Opportunities to advance species recovery and allow the military more flexibility to conduct critical training operations

Through REPI, the Department can enter into cost sharing agreements with conservation organizations and state and local governments to improve installation resilience to climate change, promote compatible land uses, and preserve habitats surrounding military installations. As of fiscal year 2020, DoD has spent approximately \$354 million and leveraged nearly \$337 million in partner funding on REPI projects to protect over 276,445 acres outside of 22 military installations with potential or existing longleaf pine habitat.

Partnerships Protect Longleaf Pines and Military Readiness

DoD also works with landscape-scale partnerships both on- and off-installation to protect and restore this



threatened ecosystem. By combining resources with other partners, DoD is able to maximize its return on investment and achieve greater outcomes.

One of these partnerships, America's Longleaf Restoration Initiative (ALRI), represents a coalition of federal and state agencies, non-profit organizations, forest industry, private landowners, and other interests who have united in a single cause: to restore the iconic longleaf pine forest in the southeastern United States.

Since 2010, the collective efforts of public and private ALRI partners have planted more than 1.5 million acres of new longleaf stands, protected over 200,000 acres of lands, and managed millions more acres of forests. These restoration efforts have translated to positive outcomes to national defense, forest resiliency, carbon sequestration, and local economies.

Additionally, the REPI program works with the National Fish and Wildlife Foundation (NFWF) Longleaf Landscape Stewardship Fund (LLSF)—a public-private partnership supported with federal and private funding—to expand, enhance, and accelerate longleaf pine ecosystem restoration across the historical range. LLSF projects thrive by providing education and technical assistance to

landowners, including minority and unserved, to inform communities on sustainable management practices and the importance of longleaf pine. Through LLSF, on-theground teams support burn crews, local cooperatives, and peer-to-peer networks to equip landowners with the skills and knowledge needed to apply fire as a forest management and stewardship tool. Since 2012, the NFWF LLSF has leveraged over \$6.3 million in DoD funds more than 9-to-1 to protect and manage longleaf forests thereby preserving the missions of 14 DoD installations.

Other large landscape efforts such as the Sentinel Landscapes Partnership and the Southeast Regional Partnership for Planning and Sustainability—both of which focus on supporting national defense, conserving natural resources, and sustaining working lands and communities—provide a forum for DoD to further engage with non-DoD entities for on- and off-installation conservation.

The link between longleaf pine and DoD is clear. While great strides are being made in the restoration of this iconic forest, long-term commitment is needed by DoD and all of its partners to ensure that longleaf persists now and into the future. Our nation's military depends upon it.

Military Installations Benefitting from the Longleaf Landscape Stewardship Fund (as of 2020)

Benefits to the Longleaf Ecosystem as a result of DoD-supported LLSF projects:



57,313 acres planted



1,506,209 acres enhanced



1,446,445 acres burned

